

DECLARATION
Utility Application

Lyon & Lyon LLP Dkt. #231/244

COPY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **ADVANCED ACTIVE ELECTRONIC DEVICES FOR MOLECULAR BIOLOGICAL ANALYSIS AND DIAGNOSTICS AND METHODS FOR MANUFACTURE OF SAME** the specification of which

(Check One)

☐
☒

is attached hereto OR
was filed on February 20, 1998 as United States Application Serial No.
09/026,618

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Date of Filing	Priority Claimed	
			Yes	No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	Parent Filing Date	Status-Patented, Pending or Abandoned
CIP of 08/753,962	December 4, 1996	Pending
which is a CIP of 08/534,454	September 27, 1995	Pending
which is a CIP of 08/304,657	September 9, 1994	Patented as USP 5,632,957

Send Correspondence to: David B. Murphy	ON & LYON LLP 33 W Fifth St., Suite 4700 Los Angeles, CA 90071	Direct Telephone calls to: David B. Murphy (714) 751-6606 or (213) 489-1600
--	--	---

	FULL NAME OF INVENTOR	FIRST Name Donald	MIDDLE Initial E.	LAST Name Ackley	
201	RESIDENCE & CITIZENSHIP	City Cardiff	State or Foreign Country California		Country of Citizenship USA
	POST OFFICE ADDRESS	2033 Cambridge Ave.	City Cardiff	State or Country CA	Zip Code 92007

	FULL NAME OF INVENTOR	FIRST Name Paul	MIDDLE Initial D.	LAST Name Swanson	
202	RESIDENCE & CITIZENSHIP	City Santee	State or Foreign Country California		Country of Citizenship USA
	POST OFFICE ADDRESS	10854 Susie Lane	City Santee	State or Country Californina	Zip Code 92071

	FULL NAME OF INVENTOR	FIRST Name Scott	MIDDLE Initial O.	LAST Name Graham	
203	RESIDENCE & CITIZENSHIP	City San Diego	State or Foreign Country California		Country of Citizenship USA
	POST OFFICE ADDRESS	12592 Caminito Mira del Mar	City San Diego	State or Country California	Zip Code 92130

	FULL NAME OF INVENTOR	FIRST Name Elizabeth	MIDDLE Initial L.	LAST Name Mather	
204	RESIDENCE & CITIZENSHIP	City San Diego	State or Foreign Country California		Country of Citizenship USA
	POST OFFICE ADDRESS	412 Maler Road	City San Diego	State or Country California	Zip Code 92129

	FULL NAME OF INVENTOR	FIRST Name Timothy	MIDDLE Initial L.	LAST Name LeClair	
205	RESIDENCE & CITIZENSHIP	City San Diego	State or Foreign Country California		Country of Citizenship USA
	POST OFFICE ADDRESS	4944 Cass Street, #511	City San Diego	State or Country California	Zip Code 92109

	FULL NAME OF INVENTOR	FIRST Name William	MIDDLE Initial F.	LAST Name Butler	
206	RESIDENCE & CITIZENSHIP	City La Jolla	State or Foreign Country Californina		Country of Citizenship USA
	POST OFFICE ADDRESS	8519 Sugarman Drive	City La Jolla	State or Country Californina	Zip Code 92037

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of Inventor	201
Date	9/10/98

Signature of Inventor	202
Date	9/10/98

Signature of Inventor	203
Date	9/17/98

Signature of Inventor	204
Date	9/10/98

Signature of Inventor	205
Date	9/17/98

Signature of Inventor	206
Date	9/10/98

(Signatures should conform to names as presented at 201 et seq. above.)

POWER OF ATTORNEY

COPY Patent 231/244

Nanogen, Inc., assignee(s) of the application for United States Letters Patent for an improvement in ADVANCED ACTIVE ELECTRONIC DEVICES FOR MOLECULAR BIOLOGICAL ANALYSIS AND DIAGNOSTICS AND METHODS FOR MANUFACTURE OF SAME by Donald E. Ackley; Paul D. Swason; Scott O. Graham; Elizabeth L. Mather; Timothy L. LeClair; and William F. Butler the specification of which was

- ☐ executed on even date herewith, or
- ☒ filed February 20, 1998 having Serial No. 09/026,618.

As a named inventor, I hereby appoint as my attorneys, with full power of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: Roland N. Smoot, Reg. No. 18,718; Conrad R. Solum, Jr., Reg. No. 20,467; James W. Geriak, Reg. No. 20,233; Robert M. Taylor, Jr., Reg. No. 19,848; Samuel B. Stone, Reg. No. 19,297; Douglas E. Olson, Reg. No. 22,798; Robert E. Lyon, Reg. No. 24,171; Robert C. Weiss, Reg. No. 24,939; Richard E. Lyon, Jr., Reg. No. 26,300; John D. McConaghy, Reg. No. 26,773; William C. Steffin, Reg. No. 26,811; Coe A. Bloomberg, Reg. No. 26,605; J. Donald McCarthy, Reg. No. 25,119; John M. Benassi, Reg. No. 27,483; James H. Shalek, Reg. No. 29,749; Allan W. Jansen, Reg. No. 29,395; Robert W. Dickerson, Reg. No. 29,914; Roy L. Anderson, Reg. No. 30,240; David B. Murphy, Reg. No. 31,125; James C. Brooks, Reg. No. 29,898; Jeffrey M. Olson, Reg. No. 30,790; Steven D. Hemminger, Reg. No. 30,755; Jerrold B. Reilly, Reg. No. 32,293; Paul H. Meier, Reg. No. 32,274; John A. Rafter, Jr., Reg. No. 31,653; Kenneth H. Ohriner, Reg. No. 31,646; Mary S. Consalvi, Reg. No. 32,212; Lois M. Kwasigroch, Reg. No. 35,579; Lawrence R. LaPorte, Reg. No. 38,948; Robert C. Laurenson, Reg. No. 34,206; Carol A. Schneider, Reg. No. 34,923; Hope E. Melville, Reg. No. 34,874; Michael J. Wise, Reg. No. 34,047; Richard J. Warburg, Reg. No. 32,327; Kurt T. Mulville, Reg. No. 37,194; Theodore S. Maceiko, Reg. No. 35,593; Bruce G. Chapman, Reg. No. 33,846; and F.T. Alexandra Mahaney, Reg. No. 37,668.

Send Correspondence to: David B. Murphy	LYON & LYON LLP 633 W Fifth St., Suite 4700 Los Angeles, CA 90071-2066	Direct Telephone calls to: (213) 489-1600 or (714) 751-6606
--	--	--

I, the undersigned, declare that I am the (an) assignee of the above-identified application or, if the assignee is a corporation, partnership or other association, I am authorized to make this appointment on behalf of the assignee and I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 19 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full Name of Assignee: Nanogen, Inc.	
Post Office Address 10398 Pacific Center Court, San Diego, CA 92121	
Signature of Declarant or Assignee: <i>David B. Murphy</i>	Date: 9/17/98



COPY

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

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06/19/00

FEBRUARY 01, 1999

PTAS

LYON & LYON LLP
DAVID B. MURPHY
633 WEST FIFTH STREET, SUITE 4700
LOS ANGELES, CA 90071-2066

100848222A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/29/1998

REEL/FRAME: 9494/0719
NUMBER OF PAGES: 9

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ACKLEY, DONALD E.

DOC DATE: 09/17/1998

ASSIGNOR:

SWANSON, PAUL D.

DOC DATE: 09/17/1998

ASSIGNOR:

GRAHAM, SCOTT O.

DOC DATE: 09/17/1998

ASSIGNOR:

MATHER, ELIZABETH L.

DOC DATE: 09/17/1998

ASSIGNOR:

LECLAIR, TIMOTHY L.

DOC DATE: 09/17/1998

ASSIGNOR:

BUTLER, WILLIAM E.

DOC DATE: 09/17/1998

RECEIVED
FEB 08 1999
U.S. PATENT AND TRADEMARK OFFICE

9494/0719 PAGE 2

ASSIGNEE:

NANOGEN, INC.
10398 PACIFIC CENTER COURT
SAN DIEGO, CALIFORNIA 92121

SERIAL NUMBER: 09026618
PATENT NUMBER:

FILING DATE: 02/20/1998
ISSUE DATE:

JOANN STEWART, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

MRD 9-29-98

10-13-1998

FORM PTO-1595
1-31-92RECORDATION
PATIU.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Docket No. 231/244

100848222

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Donald E. Ackley; Paul D. Swanson; Scott O. Graham;
Elizabeth L. Mather; Timothy L. LeClair; William J. Butler

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

2. Name and address of receiving party:

Name: Nanogen, Inc.

Internal Address: _____

City: _____ State: _____ Zip: _____

Street Address: 10398 Pacific Center CourtCity: San Diego State: CA Zip: 92121Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____Execution Date: September 17, 1998

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: September 17, 1998A. Patent Application No(s). 09/026,618

B. Patent No(s).: _____

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: David B. MurphyInternal Address: LYON & LYON LLP633 West Fifth Street, Suite 4700Los Angeles, CA 90071-20666. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41):

\$ 40.00

☒ Enclosed☐ Charge this Deposit Account if any additional fee is required8. Deposit Account Number: 12-2475

DO NOT USE THIS SPACE

9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David B. Murphy
David B. Murphy, Reg No. 31,125Date: Sept 25, 1998

Total number of pages including cover sheet: _____

OMB No. 0651-0011 (exp. 4/94)

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Mail documents to be recorded with required cover sheet information to:

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Box Assignments

Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project, (0651-0011), Washington, D.C. 20503

OC-11866.1

CERTIFICATE OF MAILING
(37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Denise N. Doss

Name of Person Mailing Paper

Signature of Person Mailing Paper

September 25, 1998

Date of Deposit

ASSIGNMENT

WHEREAS, WE, DONALD E. ACKLEY, a citizen of the United States, residing at 2033 Cambridge Avenue, Cardiff, California 92007, PAUL D. SWANSON, a citizen of the United States, residing at 10854 Susie Lane, Santee, California 92071, SCOTT O. GRAHAM, a citizen of the United States, residing at 12592 Caminito Mira del Mar, San Diego, California 92130, ELIZABETH L. MATHER, a citizen of the United States, residing at 412 Maler Road, San Diego, California 92129; TIMOTHY L. LECLAIR, a citizen of the United States, residing at 4944 Cass Street, #511, San Diego, California 92109; and WILLIAM F. BUTLER, a citizen of the United States, residing at 8519 Sugarman Drive, La Jolla, California 92037 (hereinafter referred to as "ASSIGNORS"), have invented and own a certain invention entitled *ADVANCED ACTIVE ELECTRONIC DEVICES FOR MOLECULAR BIOLOGICAL ANALYSIS AND DIAGNOSTICS AND METHODS FOR MANUFACTURE OF SAME* for which application for Letters Patent of the United States of America has been filed on February 20, 1998, assigned Serial No. 09/026,618; and

WHEREAS, NANOGEN, INC., a corporation organized and existing under and by virtue of the laws of the State of California and having its principal place of business at 10398 Pacific Center Court, San Diego, California 92121 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the exclusive right, title and interest in, to and under said invention and in, to and under any Patent or similar legal protection to be obtained therefor in the United States of America, its territorial possessions and in any and all countries foreign thereto.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer and set over unto the said ASSIGNEE, its successors and assigns, the full and exclusive right, title and interest to said invention and to all

Letters Patent or application or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for said invention by said application, and to any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under the International Convention; and ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent or any legal equivalent thereof to said ASSIGNEE, its successors and assigns, in accordance with this Assignment.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Agreement;

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents in the United States or in any foreign country, which may be necessary or desirable to carry out the purposes thereof.

WITNESS my hand at San Diego, California, this
10th day of September, 1998.

CEJ
DONALD E. ACKLEY, Ph.D.

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO).

On 9/10/98 before me, DEANN L. ZELLMANN, personally appeared
DONALD E. ACKLEY

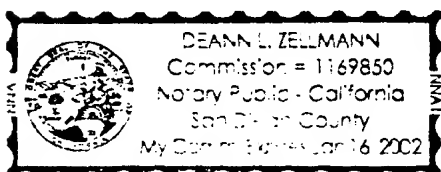
☐ personally known to me

- OR -

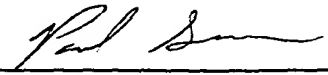
☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the
same in his/~~her~~/their authorized capacity(ies), and that by his/~~her~~/their signature(s) on the instrument
the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Deann L. Zellmann
Notary Public in and for
said County and State



WITNESS my hand at San Diego, California, this
10th day of September, 1998.



PAUL D. SWANSON, Ph.D.

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO).

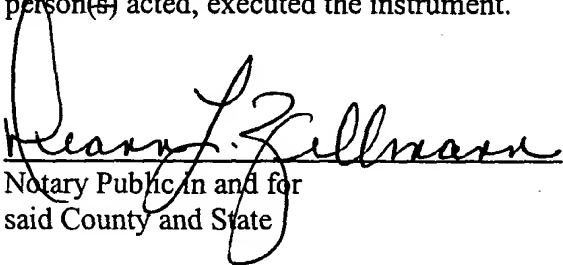
On 9/10/98 before me, DEANN L. ZELLMANN, personally appeared
PAUL D. SWANSON

☐ personally known to me

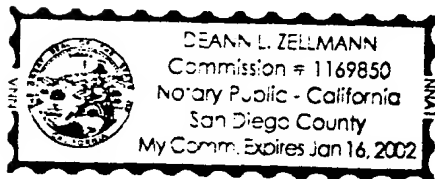
- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the
same in his/~~her~~/their authorized capacity(ies), and that by his/~~her~~/their signature(s) on the instrument
the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Notary Public in and for
said County and State



WITNESS my hand at San Diego, California, this

17th day of September, 1998.

Scott O. Graham

SCOTT O. GRAHAM, Ph.D.

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

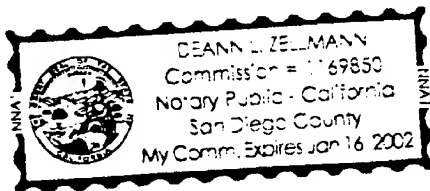
On 9/17/98 before me, DEANN L. ZEUMANN, personally appeared
SCOTT O. GRAHAM

☐ personally known to me

- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Deann L. Zeumann
Notary Public in and for
said County and State

WITNESS my hand at San Diego, California, this

10th day of September, 1998.

Elizabeth L. Mather
ELIZABETH L. MATHER, Ph.D.

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO) ss

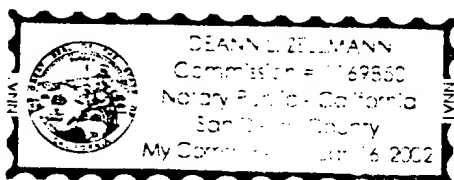
On 9/10/98 before me, DEANN L. ZEUMANN, personally appeared
ELIZABETH L. MATHER

☐ personally known to me

- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Deann L. Zeumann
Notary Public in and for
said County and State

WITNESS my hand at SAN DIEGO, California, this
17th day of SEPTEMBER, 1998.

T. L. Leclair
TIMOTHY L. LECLAIR

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

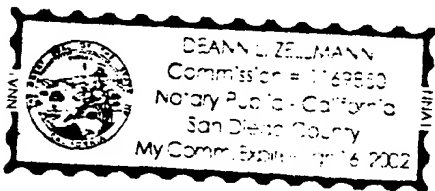
On 9/11/98 before me, DEANN L. ZELLMANN, personally appeared
TIMOTHY L. LECLAIR

☐ personally known to me

- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Deann L. Zellmann
Notary Public in and for
said County and State

WITNESS my hand at San Diego, California, this
10th day of September, 1998.

William F. Butler
WILLIAM F. BUTLER, Ph.D.

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO).

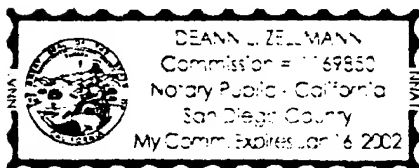
On 9/10/98 before me, DEANN L. ZELLMANN, personally appeared
WILLIAM F. BUTLER

☐ personally known to me

- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument
the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Deann L. Zellmann
Notary Public in and for
said County and State